

WHAT I CLAIM AS MY INVENTION IS:

- [318] 1.A collapsible cargo container consists of six-component frame panels: a floor frame panel, a ceiling frame panel, a left frame panel, a right frame panel, a front frame panel, a back frame panel; each of said six component frame panels is composed of metal beams, also there are two metal posts in said right and left frame panels; said six component frame panels are assembled together through their female pin base connectors, male pin base connectors, joint T pin holders, and joint T pins; said female pin base connector and said male pin base connector are used to assemble said floor frame panel, said front/back frame panels, and said ceiling frame panel together; said joint T pin holder and said joint T pin are used to assemble said right/left frame panels and said floor/ceiling frame panels together.
- [319] 2.Base parts (shown in figure 37 and figure 38) support “collapsible cargo container frame panel assembly” (shown in figure 36A, figure 36B, figure 36C and FIG 36D), thereby said “collapsible cargo container frame panel assembly” displaces its carried load at four corner points of “shipping floor frame panel” (shown in figure 39A/C/D and figure 39B); which minimizes said load impact on said “shipping floor frame panel”; thus makes it possible for a collapsible cargo container loaded with component frame panels to operate normally despite its front/back frame panels replaced by vertical posts (figure 1A, figure 1B, figure 1C and figure 1D); which has been proved by said collapsible cargo container frame structure analysis result.

- [320] 3. Through connectors (shown in figure 53C and figure 53D), connect two 20-foot floor/ceiling frame panels into a 40-foot equivalent frame panel (shown in figure 49C, figure 49D, figure 51C and figure 51D), thus keeps the load impact from disassembled 20-foot collapsible container frame panels to behave the same as disassembled 40-foot collapsible container frame panels; therefore, said 40-foot equivalent frame panels can be load into 40-foot collapsible container to reduce 20-foot collapsible cargo container repositioning more effectively.
- [321] 4. A 40-foot collapsible cargo container and a 40-foot high cube collapsible cargo container in accordance with claim 1 and claim 2 consists of six component frame panels; said six component frame panels are a floor frame panel, a ceiling frame panel, a front frame panel, a back frame panel, a right frame panel where the doors located and a left frame panel; said empty 40 foot collapsible cargo container is disassembled into six component frame panels during its empty repositioning; said component frame panels from said disassembled collapsible cargo container are loaded into "shipping collapsible cargo container", and shipped to a destination; said collapsible cargo container disassembled will remain disassembled until needed which can reduce the space demand in container yards.
- [322] 6. A 20-foot collapsible cargo container in accordance with claim 1, claim 2 and claim 3 consists of six component frame panels; said six component frame panels are a floor frame panel, a ceiling frame panel, a front frame panel, a back frame panel, a right frame panel where the doors located and a left frame panel; said empty 20 foot collapsible cargo container is disassembled into six component frame panels, then assembled into 40 foot equivalent component frame panels during its empty

repositioning; said 40 foot equivalent component frame panels from said disassembled collapsible cargo container are loaded into 40 foot "shipping collapsible cargo container", and shipped to a destination; said collapsible cargo container disassembled will remain disassembled until needed which can reduce the space demand in container yards.

[323] 7. Through a machinery that is capable of holding, lifting, moving and positioning collapsible cargo container component frame panels, said collapsible cargo container related disassembling, loading, unloading, and assembling process can be automated to meet said logistics industry needs.

[324] 8. Fourteen 40-foot collapsible cargo containers in accordance with claim 6, when disassembled, can be loaded into five 40-foot collapsible containers, thus reduce the empty collapsible cargo container repositioning by 73%; two 40-foot high cube collapsible cargo containers in accordance with claim 7, when disassembled, can be loaded into a 40-foot high cube collapsible containers, thus reduce the empty collapsible cargo container repositioning by 66%; fourteen 20-foot collapsible cargo containers in accordance with claim 8, when disassembled, can be loaded into four 40-foot collapsible containers, thus reduce the empty collapsible cargo container repositioning by 82%; thirteen 20-foot high cube collapsible cargo containers in accordance with claim 9, when disassembled, can be loaded into four 40-foot collapsible containers, thus reduce the empty collapsible cargo container repositioning by 76%.